REMARKS

In response to the Office Action mailed June 16, 2006, the Examiner rejected claims 3, 5, 8, 12, 17, 19, 27, 29, 31, 39, 41, 44, 48, 53, and 55 under 35 USC § 112 as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention; rejected claims 1-7, 9-14, 16-30, 32-43, 45-50, and 52-60 under 35 U.S.C. §102(e) as anticipated by U.S. Application Publication No. 2004/0243560 to Broder et al (Broder); and rejected claims 8, 15, 31, 44, and 51 under 35 U.S.C. §103(a) as unpatentable over Broder in view of U.S. Patent No. 5,838,950 to Young et al. (Young).

By this Amendment, Applicant amends claims 1, 2, 3, 5, 8, 12, 15-17, 19, 25, 27, 29, 31, 33, 37, 39, 41, 44, 48, 51, 53, and 55 to improve form.

Claims 1-60 are currently pending.

Rejection under 35 U.S.C. §112

Applicant amended claims 3, 5, 8, 12, 17, 19, 27, 29, 31, 39, 41, 44, 48, 53, and 55 as well as claims 15 and 51 (see Office Action, page 17, last ¶) in response to the Examiner's rejection under 35 U.S.C. §112. Accordingly, the rejections of those claims under section 112 should be withdrawn.

Rejection under 35 U.S.C. §102(e)

The Examiner rejected claims 1-7, 9-14, 16-30, 32-43, 45-50, and 52-60 under 35 U.S.C. §102(e) as anticipated by Broder. Applicant respectfully traverses this rejection.

Claim 1 defines a method for indexing documents in a collection of documents, each document including one or more index terms. Claim 1 recites a combination including, among other things, "determining a value x such that at least a majority of the

index terms occur in x documents or fewer, where x is an integer."

The Examiner alleges that Broder's "n" at page 17 and 18, ¶¶ 0307 and 0314 (lines1-3 and 3-9, respectively) discloses the step of "determining a value x" as recited in claim 1. Specifically, Broder states:

> Setting the WAND Threshold
>
> Assume that a user wishes to retrieve the top n scoring documents for a given query. The algorithm maintains a heap of size n to keep track of the top n results. After calling the init( ) function of the WAND iterator, the algorithm calls the next( ) function to receive a new candidate document. When a new candidate is returned by the WAND iterator, this document is fully evaluated using the system's scoring model, resulting in the generation of a precise score for this document. If the heap is not full the candidate document is inserted into the heap. If the heap is full and the new score is larger than the minimum score in the heap, the new document is inserted into the heap, replacing the document with the minimum score.

Broder, ¶¶ 0306-0307. Broder's value "n" merely represents the number of documents retained by a user in a heap. These "n" retained documents exceed a score, but nowhere does Broder disclose that "n" should indeed be determined so that "a majority of the index terms occur in x documents or fewer." Indeed, Broder uses the score (see, e.g., Broder, ¶¶ 0263-274, "sum of the weights") as a "pruning mechanism," not as a mechanism to ensure that "a majority of the index terms occur in x documents" as recited in claim 1. Accordingly, Broder fails to disclose of suggest at least the claim 1 step of "determining a value x such that at least a majority of the index terms occur in x documents or fewer, where x is an integer." Moreover, since Broder fails to disclose or suggest this "determining x value" step recited in claim 1, Broder also necessarily fails to disclose the claim 1 "generating" step since it recites the determined "x" value. For at least these reasons, claim 1 and claims 2-7 and 9-14, at least by reason of their

dependency from independent claim 1, are not anticipated by Broder, and the rejection of those claims under 35 U.S.C. §102(e) should be withdrawn.

Claims 15, 37, and 51, although of different scope, includes features that are similar to those noted above for claim 1. Claims 16-24 depend from independent claim 15. Claims 38-50 depend from independent claim 37. Claims 52-60 depend from claim 51. For at least the reasons given above with respect to claim 1, claims 16-24, 37-43, 45-50, and 52-60 are not anticipated by Broder, and the rejection of those claims under 35 U.S.C. §102(e) should be withdrawn.

Claim 25 recites a combination of features including "one or more inverted lists including a quantity of postings that exceeds a value x .... where the value x is such that at least a majority of the index terms occur in x documents or fewer." For at least the reasons given above with respect to claim 1, Broder dies not disclose this feature, and thus claim 25 and claims 26-30 as well as 32-36, at least by reason of their dependency from independent claim 25, are not anticipated by Broder, Therefore, the rejection of those claims under 35 U.S.C. §102(e) should be withdrawn.

Rejection under 35 U.S.C. §103(a)

The Examiner rejected claims 8, 15, 31, 44, and 51 under 35 U.S.C. §103(a) as unpatentable over Broder in view of Young. Applicant respectfully traverses this rejection.

Claim 8 depends from claim 1 and includes all the features therein including, among other things, "determining a value x such that at least a majority of the index terms occur in x documents or fewer, where x is an integer" and "generating an inverted index for the collection of documents, the inverted index including an inverted list for

each of the index terms, each inverted list including at least one posting and, if the number of postings exceeds x, further including a skip entry after the x^{th} posting and one or more skip entries thereafter at intervals of every y^{th} posting." As noted above with respect to claim 1, Broder fails to disclose at least the claimed "determining" and "generating" steps. Although Young discloses an adapter integrated circuit, Young fails to cure the noted deficiencies of Broder. Accordingly, neither Broder or Young, whether taken along or in combination, discloses or suggests these steps, and thus the rejection of claim 8, under 35 U.S.C. §103(a) should be withdrawn.

Claims 15, 31, 44, and 51, although of different scope, include features similar to those noted above with respect to claim 8. For at least the reasons given above with respect to claim 8, the rejection under 35 U.S.C.§ 103(a) of claims 15, 31, 44 and 51 should be withdrawn.

Moreover, the Examiner appears to allege that even though Broder's system for providing information management fails to explicitly disclose the claimed ranges of "x" and "y," a person of ordinary skill would have been motivated to modify Broder with Young's integrated circuit because a skilled artisan would have been motivated to do so "to provide higher speed." See Office Action, page 15. Applicant disagrees and submits that the Examiner has not satisfied the initial burden of factually supporting a *prima facie* case of obviousness (see M.P.E.P. § 2142).

According to M.P.E.P. § 2142, the Examiner must establish three criteria to make a prima *facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In

this case, the Examiner appears to use hindsight since Applicant fails to comprehend why a skilled artisan would be motivated to combine Broder's information management system with Young's integrated circuit. Second, there must be a reasonable expectation of success. The Examiner has failed to show whether such a bizarre combination could be made operative (and Applicant doubts such a combination is even possible). Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. As noted above, the references whether taken alone or in combination fail to teach each and every element of claims 8, 15, 31, 44, and 51. Applicant submits that the Examiner has failed to establish each of these three criteria and has, thus, failed to support a *prima facie* case of obviousness. Absent such support, the rejection of claims 8, 15, 31, 44, and 51 under 35 U.S.C. §103(a) should be withdrawn for this additional reason.

CONCLUSION

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner. Applicant submits that the proposed amendments do not raise new issues or necessitate the undertaking of any additional search of the art by the Examiner, since all of the elements and their relationships claimed were either earlier claimed or inherent in the claims as examined. Therefore, this Amendment should allow for immediate action by the Examiner.

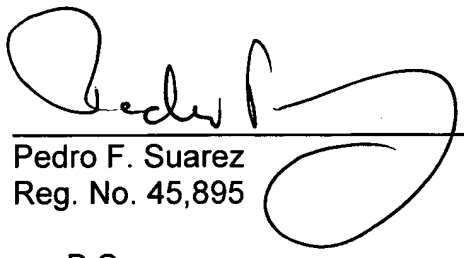
Finally, Applicant submits that the entry of the amendment would place the application in better form for appeal, should the Examiner continue to dispute the patentability of the pending claims.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify

agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

If there are any questions regarding these amendments and remarks, the Examiner is encouraged to contact the undersigned at the telephone number provided below. No fee is believed to be due, however, the Commissioner is hereby authorized to charge any fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 34874-165.

Respectfully submitted,



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